Restaurant Oil and Grease Rendering



Introduction

Improperly managed oil and grease from restaurants has become a significant problem for wastewater collection and treatment systems. Fats, oils, and greases (FOG) coat, congeal, and accumulate in pipes, pumps, and equipment, leading to the costly and hazardous flow of waste grease into drain lines, sewer lines, lift stations, drain fields, and Publicly Owned Treatment Works (POTWs). Improper disposal can result in high biological oxygen demand (BOD) and chemical oxygen demand (COD) levels, increased operating costs, and clogged collection systems. Approximately 30% of the 3,800 reported sewer system overflows in North Carolina in 1998 were caused by FOG blockage of the sewers.

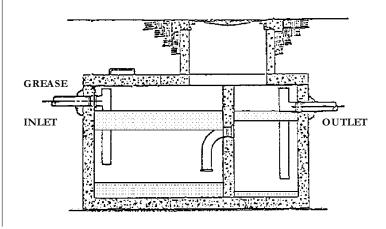
Where Does Grease Go When It Leaves a Restaurant?

A grease trap is designed to prevent grease, oil, solids, and other debris from entering the waste stream, where it becomes a problem by clogging sewers and disrupting the water flow in the system. The grease trap captures those wastes and contains them until a rendering company can properly dispose them.

A grease trap should be checked and maintained to ensure it is working properly. Backups, odors, and drainage problems are signs that the grease trap is not functioning as it should.

Grease Recycling

While pretreating wastewater through the use of grease traps, skimmers, separators, and process flow treatment systems such as carbon filtration or coagulation units can greatly reduce the problem, source reduction of oil and grease must be the first course of action. Through dry cleanup, the development of an efficient collection system and rendering program, wastewater problems can be avoided. Rendering companies or "grease recyclers" will accept oil, grease, and other animal byproducts, including deep fry fat and bones, thereby turning a nuisance waste material into a beneficial product such as animal feeds.



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